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A METHODS STUDY OF TECHNIQUES USED
IN REPORTING TO TOP MANAGEMENT

RICHARD JOSEPH KNAPP

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A METHODS STUDY OF TECHNIQUES USED
IN REPORTING TO TOP MANAGEMENT

By

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A thesis submitted to the Faculty of the School of
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satisfaction of the requirements for the
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PREFACE

This paper represents a study, in some detail, of the various aspects and methods of reporting financial data to top management. It is understood by the writer that this subject is intimately connected with the fiscal policies and particular eccentricities of the individual corporation. Moreover it is admitted, through convention, that a thorough analysis should touch upon the broad aspects of the method of financial budgeting in use. In this respect the paper is remiss, for this highly specialized field has been reduced to a common denominator wherein it is assumed that the budget, regardless of form, represents a financial plan with which actual operating results are compared. From this point of view it is intended to review the functions and composition of the financial report together with the various forms of reporting as implemented by several major corporations. The conclusions will attempt to support the thesis that, except in individual concept, there exists no ultimate reporting system. Rather, it is a proposition of determining the method of reporting which best fulfills the needs of the particular organization.

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Exercises for Chapter 1

1. Let $S = \{1, 2, 3, \dots\}$ be the set of natural numbers. Define a relation R on S by aRb if and only if a and b have the same parity. Is R an equivalence relation? Justify your answer.
2. Let $S = \{1, 2, 3, \dots\}$ be the set of natural numbers. Define a relation R on S by aRb if and only if a divides b . Is R an equivalence relation? Justify your answer.
3. Let $S = \{1, 2, 3, \dots\}$ be the set of natural numbers. Define a relation R on S by aRb if and only if a and b are coprime. Is R an equivalence relation? Justify your answer.
4. Let $S = \{1, 2, 3, \dots\}$ be the set of natural numbers. Define a relation R on S by aRb if and only if a and b have the same number of prime factors. Is R an equivalence relation? Justify your answer.
5. Let $S = \{1, 2, 3, \dots\}$ be the set of natural numbers. Define a relation R on S by aRb if and only if a and b have the same number of divisors. Is R an equivalence relation? Justify your answer.
6. Let $S = \{1, 2, 3, \dots\}$ be the set of natural numbers. Define a relation R on S by aRb if and only if a and b have the same number of prime divisors. Is R an equivalence relation? Justify your answer.
7. Let $S = \{1, 2, 3, \dots\}$ be the set of natural numbers. Define a relation R on S by aRb if and only if a and b have the same number of divisors that are prime. Is R an equivalence relation? Justify your answer.
8. Let $S = \{1, 2, 3, \dots\}$ be the set of natural numbers. Define a relation R on S by aRb if and only if a and b have the same number of divisors that are composite. Is R an equivalence relation? Justify your answer.
9. Let $S = \{1, 2, 3, \dots\}$ be the set of natural numbers. Define a relation R on S by aRb if and only if a and b have the same number of divisors that are prime and composite. Is R an equivalence relation? Justify your answer.
10. Let $S = \{1, 2, 3, \dots\}$ be the set of natural numbers. Define a relation R on S by aRb if and only if a and b have the same number of divisors that are prime and composite. Is R an equivalence relation? Justify your answer.

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CHAPTER I

THE REPORTING FUNCTION

With the ever increasing complexity of contemporary business, the financial reporting function has achieved a position of the utmost importance. This statement is based on the hypothesis that, in almost any type of industrial enterprise, the real measure of performance, either individual or company, is largely financial. Supporting this theory is the fact that the manifestation of the reporting function is reflected in the company's report to its stockholders. Following the logical, though not necessarily actual, sequence of events, it is submitted that the stockholders evaluate the performance of the board of directors, who in turn evaluate the corporate management. Eventually the evaluation process filters down to each individual in the organization.

Although, admittedly, each step of the reporting function bears on the ultimate success or failure of the venture, there is one area wherein the dynamic nature of the enterprise dictates a need for a factual, current system of reports contributing directly to the top level decision making process. This area includes those reports which are made to top management.

Who is top management? The answer to this question is comprised of various and complicated concepts. One answer might

APPENDIX

APPENDIX A

1. The first part of the report is devoted to the description of the

method used for the determination of the concentration of the

substance in the sample. The method is based on the measurement of the

absorbance of the sample at a wavelength of 254 mμ.

The absorbance is measured by means of a spectrophotometer.

The concentration of the substance in the sample is determined by

means of a standard curve. The standard curve is obtained by

measuring the absorbance of a series of standard solutions of known

concentration. The concentration of the substance in the sample is

determined by comparing the absorbance of the sample with the

absorbance of the standard solutions.

The concentration of the substance in the sample is determined by

means of a standard curve.

2. The second part of the report is devoted to the description of the

method used for the determination of the concentration of the

substance in the sample. The method is based on the measurement of the

absorbance of the sample at a wavelength of 254 mμ.

The absorbance is measured by means of a spectrophotometer.

The concentration of the substance in the sample is determined by

means of a standard curve. The standard curve is obtained by

measuring the absorbance of a series of standard solutions of known

conclude that the stockholders, as the ultimate owners, constitute top management. Another theory, drawn parallel to our system of government, might state that the board of directors, representing the stockholders, makes up top management. A third concept might reason that those officers responsible for the satisfactory execution of corporate policy are really top management. This last group can be narrowed down to include those officers responsible directly to the president, and the president himself, who is responsible to the board of directors. Any attempt to establish one concept more valid than another would be solely academic and of doubtful value to the purpose of this paper. The reason for mentioning them is merely to acknowledge the existence of various concepts of top management, and to state the proposition that, regardless of form, each requires a common element necessary for effective and continued operation--an adequate system of financial reporting.¹

In reviewing the facts for the justification of a financial reporting system, a naive, but orderly, mind might inquire as to the value to be derived. This may be answered in one word: Control. Lest the semanticists and management theoreticians question the integrity of my choice of words, let it be understood that "control" is interpreted in accordance with the concept of M. Henri Fayol, the French industrialist and management expert, as published in the Bulletin de la Societe

¹Stanley F. Banas, "Management Needs Facts--And Vice-Versa," N.A.C.A. Bulletin, Section I (June, 1952), 1179.

de l'Industrie Minerale, 1916.

In an enterprise, control consists of verifying whether everything happens according to the program adopted, the orders given, and the principles established. It has as its aim to point out faults and errors so that they can be rectified and their recurrence prevented.

Well done, control is a valuable auxiliary of top management. It can give it certain necessary information which the hierarchic chain is sometimes incapable of furnishing. . . . Good control insures against those troublesome surprises which might degenerate into catastrophes.²

Further amplification is provided by M. Fayol in his address entitled, "The Administrative Theory in the State," before the Second International Congress of Administrative Science at Brussels, September 13, 1923.

Control is the examination of results. . . . Control compares, discusses, and criticizes; it tends to stimulate planning, to simplify and strengthen organization, to increase the efficiency of command and to facilitate coordination.³

The foregoing quotations are classic in their application to the reporting function in that they not only establish it as a yardstick by which actual performance is measured against planned results, but also as prime factor in motivation of management. This is apparent if one considers a situation wherein a report leads to action resulting in increased profit or the realization of other corporate objectives. It follows then, that although the primary aspects of control are largely informational, (verification, checking, comparison, etc.),

²E. S. L. Goodwin, "Control: A Brief Excursion on the Meaning of the Word," Michigan Business Review, Vol. XII, No. 1 (January, 1960), pp. 13-17 and 28.

³Ibid.

inherent action can be presumed to exist, subject to precipitation by the primary aspects.

At this point it should be clear that the reporting function is at the tap roots of the business entity. It constitutes the nerve center of the corporate body, constantly communicating information to the business brains by which decision making and planning are executed.⁴

The effectiveness of the reporting function is the most important factor in determining the contribution that the financial arm of management makes to the company's success.⁵ Although explicit in its recognition of the fact that effective reporting is extremely valuable to top management, the foregoing statement infers a direct relationship between that value and top management's view of the reporting function. In turn, it is submitted that top management's viewpoint is directly related to the interpretation placed on the reporting function by the financial executives. Therefore, since two quantities related to a third and common quantity must be related to each other, the value received from the reporting function must bear a relationship to the interpretation placed on it by the financial executives.

Here then is the crux of the situation, based on the foregoing quasi mathematical relationship which I believe to be

⁴Frank A. Lamperti and John B. Thurston, Internal Auditing for Management (New York: Prentice-Hall, Inc., 1953), p. 281.

⁵David Moffitt, "Financial Data for Top Management: Organizing and Administering the Reporting Function," The Management Review (February, 1958).

valid. The chief difference between financial executives lies in whether they regard their job primarily as one of bookkeeping or one of top management. It seems that too many financial people are inclined to overemphasize the routine reports necessary for tax purposes, legal requirements, and corporate affairs. Important though they may be, failure to relate these functional problems to the primary objectives of top management results in undermining the control desired from the reporting function.⁶ Therefore, it is essential that, as members of the management team, financial executives understand the importance of providing factual data in an easily understandable form so that top management decisions will be firmly cemented in complete and honest cognizance of the company's actual conditions and prospects, in terms of dollars and cents.

The actual mechanics of reporting are included in the reporting function, but this subject is of such scope that it will be covered thoroughly in succeeding chapters. However, it is appropriate at this time to discuss the organization and administration of the reporting function.

In accordance with one of the basic principles of organization, the responsibility for the function of reporting must be placed with one individual.⁷ Traditionally this would

⁶Lawrence G. Haggerty, "Top Management Views the Reporting Function," Reporting Financial Data to Top Management (New York: Special Report No. 25, American Management Association, April, 1957), p. 10.

⁷Benedict T. Harter, "Organizing and Administering the Reporting Function," op. cit., p. 19.

fall to the controller or the chief accountant. Though still applicable in the case of smaller companies wherein the controller is responsible for the analysis as well as the accounting, there is a trend in the larger companies toward separation of the reporting and accounting functions.⁸ This establishes the reporting and analysis function as a separate process that must begin where the bookkeeping and accounting process ends. It is then logical to assume that unless the reporting is properly organized and administered, not only will the reporting function be impaired, but the effort applied to accounting will be neutralized.

In considering the organization which delegates the reporting responsibility to the controller, it should be understood that he may delegate specific tasks to some individual who is responsible for financial planning or budgeting. However, the ultimate responsibility for the reporting function remains his. This action, in effect, separates the line and staff functions of the controller's department, and indeed induces a split personality in the controller himself. He exercises line authority with respect to the accounting function, and, by virtue of being invested with the reporting responsibility, he enjoys a staff relationship with top management. In effect a separate reporting department has been established, but it remains under the jurisdiction of the controller. As with any innovation, various advantages and disadvantages are accrued. On

⁸David Moffitt, op. cit.

the plus side, under this system, it is readily seen that additional time is made available for analysis and correlation of data obtained from the accounting function, insuring prompt submission of special reports when necessary. However, taking human nature into account, a disadvantage might be incurred in that the accountant, deprived of the analysis function, is reduced to the status of bookkeeper. A corresponding reduction in professional interest could be anticipated.

The trend in the larger companies toward separation of the reporting and accounting functions is merely an extension of the system just described. In effect, it establishes a separate reporting entity outside the controller's department with a unilateral responsibility to top management. It is an advantageous innovation in that it recognizes reporting as a vital function. Furthermore, the reporting executive is fully aware of the information required by top management, and enjoys complete objectivity in reporting it. Unless it is well coordinated, this system could lead to duplication of reports.

By and large, the greatest problem encountered by the establishment of a separate reporting unit is that of intra company relationships. Operating in a staff capacity, it is conceivable that friction could develop, not only between the reporting unit and the accounting unit, but also between the reporting and line executives. In any situation where there is the slightest hint of inspection or spying, as in the case staff performance reports written on various line functions, the ultimate in tact and sound human relations is required. Although

the company can give wide dissemination as to the purpose of the reporting unit, in the final analysis it is the personnel who either foster or deter cooperation. Prior to releasing the report, consultations are held with the line executives to determine the validity of analysis and areas in which improvements might be made. However, this practice is time consuming, and should be used only for major reports.

Regardless of how the responsibility for the reporting function is delegated, it is often necessary to revise the reports in use. In this case it is essential that all those involved be informed as to the reason for the changes and what benefits might be expected. The major step in the revision of reports lies in the objective determination of what information top management requires to function effectively.⁹ This determination is necessary, and serves as a criterion for matching the system with the various needs and organization of those executives constituting top management. Generally there is no need for voluminous detail. However, the reports should provide sufficient information to enable management to know how operations are proceeding. This will be covered more fully in Chapter II.

Finally, it is of primary importance that the reports currently in use be reviewed periodically with the recipients. In view of the dynamic nature of contemporary business, the purpose of this review is to insure that the present system is

⁹Harter, op. cit., p. 20.

being fully and efficiently utilized in attaining the objectives of the enterprise.

CHAPTER II

THE REPORT

What is a report? What data are included? How is it presented?

At this point it is assumed that general answers can be inferred from the previous chapter. However, any study of financial reporting dictates the execution of a more finely detailed analysis.

In partial answer to these questions, the following quotation is submitted.

A report in part discharges the responsibility of a subordinate to his chief. It is the completion of a task, the end of an assignment of work to be done. Just as an order should communicate all information necessary for execution, so a report should contain all the data essential to appraisal of performance. The primary requisite of a report is that it serves some really useful purpose. The ability to prepare a concise report which comes directly to the point at issue, covers all the necessary facts, and at the same time does not waste space by the inclusion of non essential details is the best possible evidence that the sub-executive has an understanding of his work, has completely thought through and analyzed the situations that have confronted him, and in short, has successfully mastered his job, and is the type of person to whom more responsibilities may be given.¹⁰

Just as any system is composed of the logical positioning

¹⁰Spriegel and Lansburgh, Industrial Management (New York: 5th edition, John Wiley and Sons, Inc., 1955), p. 286.

of one element with respect to another, so the ultimate report to top management is based on a foundation of more detailed data. This spectrum of reports includes three separate types: the accounting report, the special report, and the control report.¹¹

The accounting report contains the basic records needed to facilitate administration at all levels of supervision. The special report is essentially an analysis to determine the cause, effect, and remedy of a particular business problem. Control reports are those which provide management with a continuing, systematic review of trends and current developments in each major segment of the business. In addition they are intended to call attention to short run and/or long run conditions that warrant further study and investigation. It is logical to conclude that control reports, based on accounting reports, are meant to call attention to situations which require special reports. Therefore, since special reports are also based on accounting data, the traditional theory, that declares the conventional accounting report as the basis for a sound financial reporting system, is valid.

All three of the foregoing types of report are necessary in any large industrial organization. However, they should not be intermingled or organized to serve any purpose other than their own. Should a control report be made sufficiently detailed to permit analysis, it is safe to assume that it is too compli-

¹¹ John G. McClean, "Better Reports for Better Control," Harvard Business Review (May-June, 1957), p. 95.

cated to serve its main function. Conversely, should the organization attempt to operate solely on the basis of accounting and special reports, management will be deprived of the broad review essential to the control function.

With respect to the information to be included in the accounting report, it becomes apparent that only the finest line exists between accounting and control reports. The determining factor lies in whether the accounting report is static or dynamic.¹²

As the foundation of the reporting system, the accounting report provides periodic, recurring information on current operations and financial condition. In most companies this report is presented monthly, consisting of a profit and loss statement, a statement of financial condition, and supporting schedules which show the results achieved by divisions, product lines, and departments, as dictated by the organization and policies of the company. Presented thusly, the accounting report represents static financial analysis of a nature inconsistent with that of the control report.

However, should the accounting report contain a comparison of the actual financial condition of the business with a budget or forecast, it technically becomes a control report. In this form it represents dynamic financial analysis.¹³ It should

¹²David R. Anderson and Leo G. Schmidt, Practical Controllershship (Homewood, Ill., Revised edition, Richard D. Irwin, Inc., 1961), p. 380.

¹³Ibid., p. 434.

be noted that this type of control report presents a great mass of detailed information with the possibility that its effectiveness might be impaired. This of course depends on the personal preference of individual managements.

Having established the close relationship between accounting and control reports, an examination of the content of the special report is in order. In one respect this report is probably the most important in the achievement of control through the reporting function. This statement is based on the fact that, while the format and content of the accounting and control reports are subject to convention and management preference, the effectiveness of the special report depends on the interpretive and communicative skill of the financial executive.

In determining the cause, effect, and remedy for that problem depicted in a control report, the special report differs greatly in form and content from those in the control category. However, since analysis always runs back to the accounting data from which the control report is derived, a definite relationship exists between the two.

Since a complete analysis is required, factual accuracy and completeness cannot be sacrificed in favor of speed. Originality of approach is afforded in preparation of the special report since accuracy of fact and conclusion is of little value if the report does not convey the essence of the subject matter.¹⁴

¹⁴James F. Lillis, "Motivating Executive Action Through Reports," Reports to Top Management for Effective Planning and Control (New York: American Management Association, 1953), p. 9.

If the report is to be in narrative form, it should be well constructed with clear definition of the problem together with recommendations supported by facts.

In some cases the special report is combined with the control report.¹⁵ This is achieved by using an interpretive narration as a backdrop for the control report. Under this system there are five suggested approaches.

a. Trend Emphasis

While the traditional accounting reports show the condition by month and year, it is helpful to relate each segment to both the budget and corresponding segment of the previous year.

b. Current Applicability

Due to the fact that the majority of accounting reports are historical in nature, unsatisfactory trends might get out of hand before they are detected. It is necessary then to analyze current trends, and make a decision based on the projection.

c. Causes and Effects

Should the control report reflect a deviation from the budget or previous period, it is essential that the cause and effect be the subject of an interpretive report.

d. Clarity and Brevity

The report should be long enough to tell the full

¹⁵ Ronello B. Lewis, Financial Controls for Management (Englewood Cliffs, N. J.: Prentice Hall, Inc., 1961), p. 2.

story, but short enough to be studied and assimilated by those to whom the report is directed.

e. Focal Points

Through the process of elimination, the weakest spots are isolated and attention focused on them.

The narrative is the interpretive section of the special control report, and also contains five guideposts.

1. Get the Facts

As stated previously, the basis of fact lies in the traditional accounting report. The significant data should be selected and analyzed in a clear and logical manner.

2. Arrange the Facts for Easy Use

In this respect, the facts are arranged so as to aid the analyst in preparing his report for management.

3. Select the Route to be Followed

The objective of the special report is to determine cause and effect of a particular problem. In this sense, it is not intended to be all things to all people. Therefore, a route to the analysis should be selected for, and slanted toward those who are in a position to remedy the situation.

4. Work From the Top Down

This suggestion is based on the theory that, if concentration is placed on the largest problem, the smaller ones will tend to take care of themselves.

5. Just Say It

This is a plea for a clear concise report, stripped of flowery adjectives, adverbs, and interjections. Although a

certain amount of syntax is essential to satisfactory communications, it should be born in mind that a report, not a major literary effort, is being undertaken.

The foregoing guides were presented, not only as an aid in preparing a special report, but also to illustrate the relationship of this report to the control report. Mr. Lewis' interpretation is such that basically the two are one in the same.¹⁶ This concept is open to question, however, on the basis that, should a control report indicate satisfactory performance, a special report is not necessary. Therefore it may be concluded that the foregoing preparation guides are, in effect, applicable to the control report.

In determining how the foregoing reports are to be presented, it is necessary to establish their dissemination. This in turn depends on the organization of the company. In order that it need not be necessary to conduct an organizational survey of the various companies at this time, the information pyramid¹⁷ (Fig. 1) will be utilized as a common denominator in

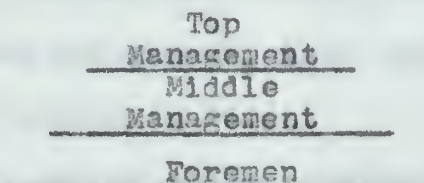


Fig. 1.--The Information Pyramid

¹⁶Ibid., pp. 22-25.

¹⁷F. S. Cornell, "A Revised System for Improved Management Control," Reporting Financial Data to Top Management, op. cit., p. 162.

describing the presentation and dissemination processes.

The base support of the structure, representing the first line of supervision, is the foreman. At this level it is clear that if control is to be achieved and maintained, certain reports are necessary. However, since they tend to deal with departmental performance, only applicable portions of the company report should be utilized. These are prepared in some detail, along traditional accounting lines.

The link connecting the first line of supervision with top management is middle management. It is this level that receives the full impact of the accounting, control, and special reports. In many organizations it is this connecting link that is responsible for preparation of the financial reports for top management. Therefore, it can be seen that reports to middle management are highly detailed and all inclusive. These reports would include both static and dynamic analysis of the traditional accounting statements.

It is in reporting to top management that artistry and imagination run rampant. At this level, the need is almost exclusively for control and special reports, and depending on the tastes of top management, they may be presented in full detail or on an exception basis.

The full detail method consists of the submission of the full financial report in terms of either static or dynamic analysis. Static financial statements have little value in the achievement of control in that there is no basis for comparison. Therefore, the full detail method is applied in the dynamic

sense by the provision of a yardstick for evaluation of performance. This yardstick may consist of either the financial plan or similar accounting reports for preceding periods.

In presenting a fully detailed report to top management, it can be seen that the virtue of completeness is obtained. But at what price? There are several considerations which might offset this one advantage. Due to the mass of detail, wherein it is necessary to proceed from item to item in order to obtain the desired information, valuable time and interest could be lost. Furthermore, it is entirely possible to overlook pertinent data in the formal accounting report.

At the other extreme of the report presentation spectrum is the concept of managing by exception.¹⁸ As the name implies, this procedure involves passing over the "ordinary" reports, and concentrating on those which indicate conditions deviating from the norm. This is invaluable in getting to the point quickly when reporting to top management. However, the value to be derived from this type of report is a function of management's view toward problems. A healthy attitude would take the position that accepts problems as a part of management, and as such, remain to be detected and solved as quickly as possible. Unless this viewpoint is taken, the value of the management by exception principle is decreased through impairment of objectivity on the part of the reporting department.

¹⁸Morris Budin, "Reports: A Problem in the Control Function of Management," Advanced Management (June, 1958).

The third method of reporting to top management lies somewhere between the two previously mentioned. It depends, for support, on the data contained in the accounting reports, but is designed to lend graphic meaning to the figures. This is accomplished through the use of charts and graphs which show trends and comparative pictures. It has been determined that this method is most effective in giving an interesting and comprehensive presentation of a report. The use of charts has become so popular that it has been extended down to the ranks of middle management as a supplementary measure.¹⁹

¹⁹Ernest C. Brelsford, "Using Charts to Present Financial Data," Reports to Top Management, op. cit., p. 94.

CHAPTER III

REPORT IMPROVEMENT

Regardless of the type or content of the report under discussion, it is safe to assume that, if it is based on data acquired through traditional accounting techniques, it represents historical fact.²⁰ As such, it is quite apparent that its value is inversely proportional to the time required to present the information to those who need to know. Such reporting is considered after the fact.

In the past, many attempts have been made to reduce to a minimum the time interval between the report and fact. Fundamentally, these techniques involve preparation of a closing schedule or time table; measurement of performance against the time table; determining the causes for late results; taking effective corrective action; and constantly improving and tightening the schedule.

Implementation of this method leads to the conclusion that the bottlenecks creating late reports can be eliminated by either changing the basic reporting system or the type of report involved. In essence, this traditional approach to speeding up

²⁰ K. S. Axelson, "Effective Control Through Responsibility Reporting," The Management Review (May, 1961).

the report evolves into a contest of constantly revising the deadline with respect to the schedule.

In this day of automation and electronic data processing, it has become progressively easier to match the deadline with the schedule. However, the reporting remains after the fact, and at the pace of contemporary business, this situation is often less than satisfactory. If reporting after the fact is not adequate, then by simple deduction, the solution must lie in the field of prognostic decision making,²¹ or reporting before the fact.

Reporting before the fact consists of preparing and issuing reports before the completely detailed data have been acquired. However, in order for this type of reporting to be successful, it is essential that good budgets, forecasts, and realistic standards have been established and maintained. Once established, it is important that any abnormal situations be recognized as quickly as possible, thereby minimizing the chances of a faulty prognosis.

Although it is true that a timely report is valuable, there are those who feel that it would be more beneficial to expend more effort on report improvement rather than increasing the speed of submission.²² However, what constitutes a better report for one management might not do equally as well for

²¹Ibid.

²²Ernest A. Carlson, "Earlier Reports or Better Reports," Reporting Financial Data to Top Management, op. cit., p. 35.

another. In the case of Mr. E. A. Carlson, the controller for Johnson and Johnson in 1957, the following items represent significant steps in report improvement.

1. Use of Simple Units

The rounding off of figures to the nearest hundred, thousand, or million, as applicable, would aid in trend analysis and comparison.

2. Brief and Direct Comments

This constitutes one of the most important principles of the control report. In essence, the attention should be directed toward those areas which require further investigation.

3. Personal Presentation to Management

Regardless of the thoroughness and care with which a financial report is prepared, its value is bound to be impaired if it is not presented in person. This is obvious if one stops to consider that, providing the report is performing one of its vital functions, management motivation, questions and discussion are sure to arise. If that person who is intimately acquainted with the preparation is not there to interpret the report, there are three alternate courses of action, each detrimental to effectiveness.

First, the report and its implications may be completely ignored. Secondly, the report might raise questions leading to incorrect interpretation and faulty decisions. Thirdly, as a result of questions, the report might be returned to the originator with the ensuing delay.

4. More Special, and Less Routine Reporting

The implications of this improvement are as described in Chapter II, and as practiced by Johnson and Johnson.

5. Dramatizing the Presentation

No matter how useful the data contained in report may be, the report itself is only useful in the degree to which it is made meaningful to management. In effect, this backs up the case for personal presentation with the emphasis placed on making the report as interesting as possible.

Although not a new improvement, the use of responsibility reporting has come into wide use in recent years.²³ It was developed to cope with the increasing complexity of contemporary business and personnel turnover, and is extremely valuable in reporting before the fact.

As the name suggests, this system ties operating results directly to the organization chart. In the case of a commercial enterprise, costs and income are first classified according to the individual responsible for their control, and then are broken down by the nature of expense and/or income. Essentially, this is a variation of cost accounting with the ability to pinpoint responsibility on an exception basis, and provide a means for corrective action.

In order that responsibility reporting be effective, it is absolutely necessary that there be some standard for

²³ K. S. Axelson, Responsibility Reporting (New York: Peat, Marwick, Mitchell & Co., January, 1961), p. 10.

comparison. Normally this consists of a sound budget or work measurement system and a set of realistic standard costs. In addition to providing a basis for reporting by exception, these standards are essential to the submission of reports before the fact.

An example of this system is as follows: As soon as the monthly receivables have been determined, gross income is computed and standard costs are applied to determine the standard gross profit. If there is a system of periodic reporting of actual performance against fixed standards, the average variance to date is applied to the standard costs and standard gross profit obtained. Assuming a sound budget, this may then be used in establishing rates for selling, administrative and other commercial expenses. The net result represents the projected operating income before taxes, (Fig. 2). A report of this type, prepared prior to the end of the accounting period, would be extremely valuable in making a reasonable prognosis.

Sales, net	\$ 1,000.00
Standard Costs	\$ 200.00
Average Variance to Date . .	<u>(20.00)</u>
Standard Costs, Adjusted	<u>180.00</u>
Standard Gross Profit	\$ 820.00
Selling, Administrative, and other Commercial Expenses, (Budgeted)	<u>320.00</u>
Operating Income Before Taxes .	<u>\$ 500.00</u>

Fig. 2.--Standard Costs for Prognosis

CHAPTER IV

THE DUPONT CHART SYSTEM

The previous chapters were prepared from texts and articles in a more or less theoretical sense. At this stage, it is intended to describe the operations concerning financial reporting as it is carried out in three selected companies. They were chosen on the basis of the type of reporting system in use--chart, exception, or full detail. The material included in this chapter was obtained from papers presented by T. C. Davis and Howard L. Hessler at the Financial Management Conference of the American Management Association, held in New York City, December, 1949.

The attitude at Dupont is that, any system of financial control, to be of maximum usefulness, should include an internal reporting system capable of showing the actual operating performance and balance sheet condition promptly at the close of the accounting period. Moreover, it is felt that it is the duty and responsibility of the financial staff to make these data available to top management when required, and in a form which will most completely and expeditiously reveal the operating results of each particular product line.

One phase of the internal reporting problem was solved with the conception of the chart system more than forty years

ago. This system utilizes charts and graphs for presenting to the Executive Committee, data pertinent to the performance of each operating investment. The following is a description of that system.

An essential element in the chart presentation is a basic understanding of the Dupont organization, (Fig. 3).

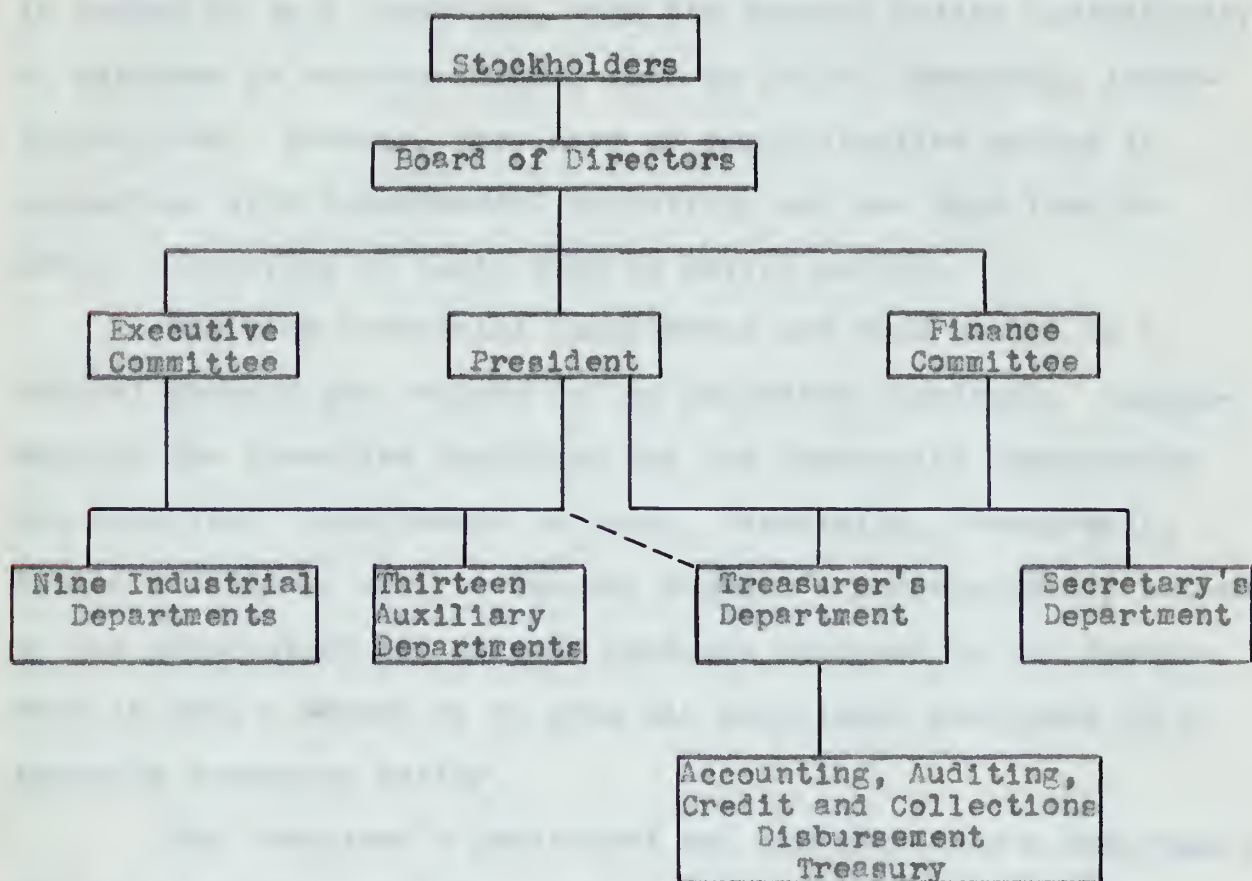


Fig. 3.--Dupont Organization

Although there are four permanent committees of the Board, the two most active in executive management are the Finance Committee, composed of nine members, and the Executive

The first step in the process of developing a business plan is to conduct a market analysis. This involves identifying the target market, understanding the needs and preferences of the target audience, and assessing the competitive landscape. The market analysis provides valuable insights into the potential size and growth of the market, as well as the key factors that influence consumer behavior.

Once the market analysis is complete, the next step is to develop a business model. This involves determining the revenue streams, identifying the key resources and capabilities, and defining the value proposition. The business model serves as the foundation for the entire business plan, as it outlines the core strategy for creating, delivering, and capturing value.



The final step in the process of developing a business plan is to create a financial plan. This involves estimating the costs of operations, projecting the revenue, and determining the break-even point. The financial plan provides a clear picture of the expected financial performance of the business, as well as the funding requirements. It is essential to ensure that the business is financially viable and that the investment is justified.

Committee, also composed of nine members. The Finance Committee meets twice monthly, and the Executive Committee all day each Wednesday, and at any other time as necessary.

The Executive Committee is comprised of the President of the Company as chairman, and eight other members who are Vice Presidents. Control of the operating end of the business is vested in this committee, with its members acting individually as advisers in various fields, such as Sales, Personnel, Advertising, etc. However, they have no administrative duties in connection with departmental operation, and are thus free to devote a majority of their time to policy matters.

The nine industrial departments are each headed by a General Manager who reports to the Executive Committee. Complementing the Executive Committee and the Industrial Departments are such staff departments as Legal, Purchasing, Treasurer's, Public Relations, etc. A General Manager's responsibility extends to the manufacture and sale of products assigned to his department in such a manner as to make his department analagous to a separate corporate entity.

The Treasurer's Department and the Secretary's Department may be regarded as Auxiliary Departments, totaling fifteen Auxiliary Departments in all. However, these Departments are shown separately, since they are responsible to the Finance Committee rather than to the Executive Committee. The functional divisions of the Treasurer's Department (accounting, auditing, credit and collection, disbursements, and treasury) are shown

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to give a divisional breakdown of the organization responsible for accounting and finance. It should be noted that it is the Treasury Division that is responsible both for financial analysis and the maintenance of the Executive Committee chart series.

The Executive Committee Charts

The charts which are to be presented in this chapter are of the kind utilized by the Executive Committee in the direction of its business. These charts and tabulations do not displace the customary financial statements which are reserved for back up analysis when necessary, but are used by the Executive Committee in reviewing with a general manager the operations of his department.

The charts are reviewed once each month with the schedule being so arranged that the charts for each department are reviewed at least once every three months. At least one set or series of charts is set up for each department, but in some cases the operations are so diverse that it is necessary to set up several series of charts for a given department. For the nine industrial departments there are approximately 350 charts divided into twenty operating investment chart series. Each of these series shows the operating results for the current year against the background of exactly the same data for the ten preceding years and a forecast for the ensuing twelve months.

In order for any system of control to function effectively, there must be some goal against which the operating results can be measured. In the case of Dupont the primary emphasis is

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placed on the return on investment, and the chart system is constructed so as to focus attention on this factor as the end result. Included are those factors which produce return on investment; gross profit on sales and turnover. The mathematical formula is as presented below, and shows that the return is shown as a function of earnings as a per cent of sales and turnover. Amplification is given in Fig. 4.

Return on Investment = Turnover X Earnings as %
of Sales.

The return on investment responds to fluctuation in these two factors, and it follows that, if there has been no change in selling price, an improvement in turnover indicates that capital is being worked harder. To put it another way, the business is getting increased sales out of the same plant and working capital.

Presentation of the Dupont Chart System (Hypothetical)

For the mathematically minded, examination of the Fig. 4 reveals that the return on investment can be arrived at in an alternate manner. In the fractions, Sales/Total Investment and Earnings/Sales, Sales cancel out, and the Return on Investment is a function of Earnings divided by Total Investment. The formula was set up in this manner so that the effect of both Turnover and Earnings as a per cent of Sales could be determined with respect to Return on Investment. The analysis of Turnover is made through charts showing Sales and Total Investment. Total Investment, in turn, is broken down into Permanent

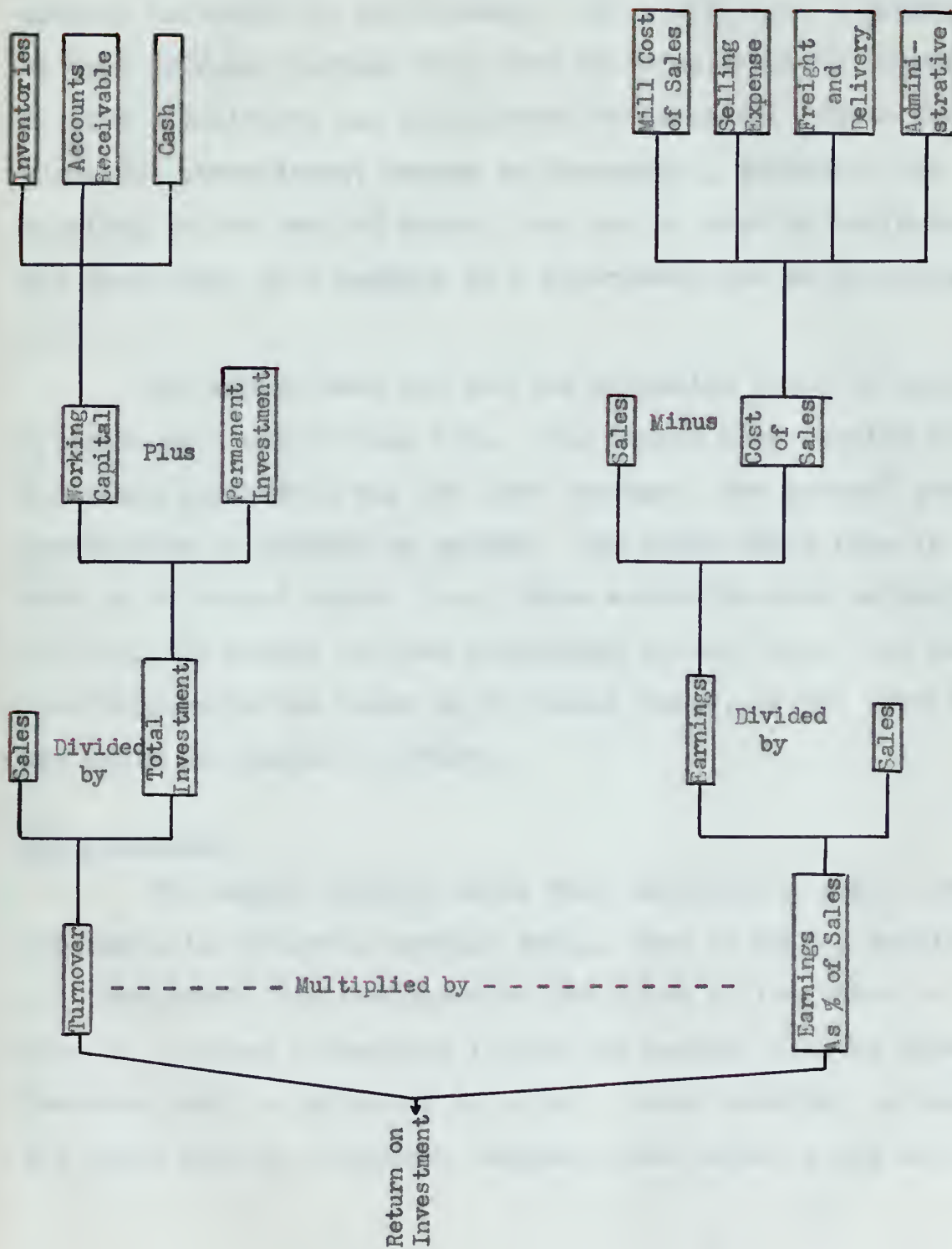
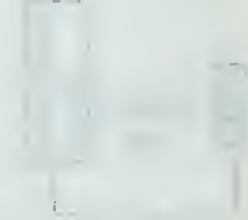


Fig. 4.--Calculation of Return on Investment



Investment and Working Capital. Further detail is shown in breaking down Working Capital into charts showing Inventories, Accounts Receivable, and Cash.

The development of Earnings as a per cent of Sales is clearly indicated by the formula. The charts show a breakdown of Cost of Sales through Mill Cost of Sales, Selling Expense, Freight & Delivery, and Administrative Expenses. These three principle percentages; Return on Investment, Turnover, and Earnings as per cent of Sales, that can be used in analyzing the operations of a company or a department are as illustrated in Fig. 5.

The annual data for the ten preceding years is plotted by means of a solid black line. The dashed line running across the chart represents the ten year average. The current year performance is charted by months. The solid black line is to date on an annual basis, i.e., three months to date multiplied by four, six months to date multiplied by two, etc. The dotted line represents one month on an annual basis, or the result for one month multiplied by twelve.

The Forecasts

The Dupont Company makes four forecasts a year. These are complete forecasts showing Sales, Cost of Sales, Earnings, and Investment, and are shown on the chart as indicated in Fig. 5. The No. 1 forecast is for the period, January through December, and is indicated by a No. 1 arrow pointing to the left. The first quarter, January, February, and March is put on an

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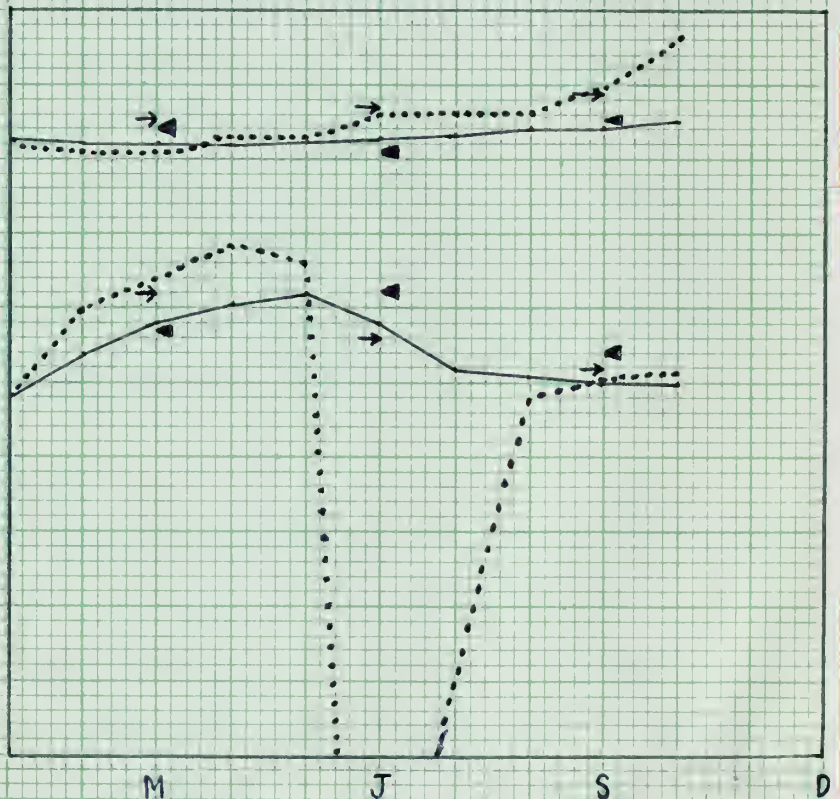
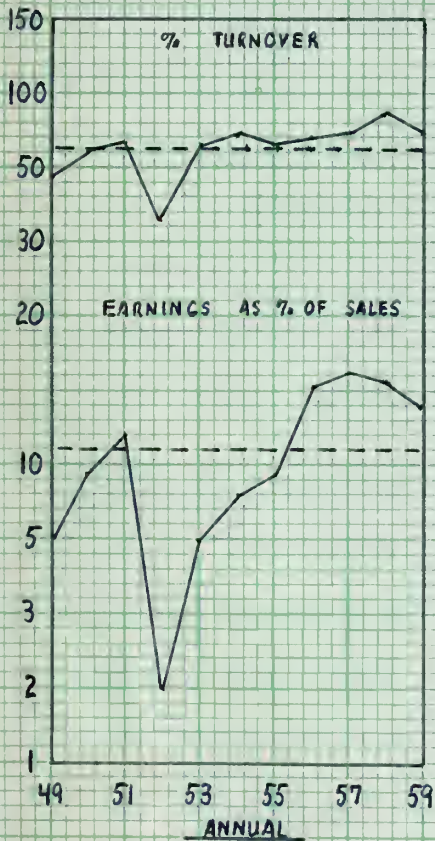
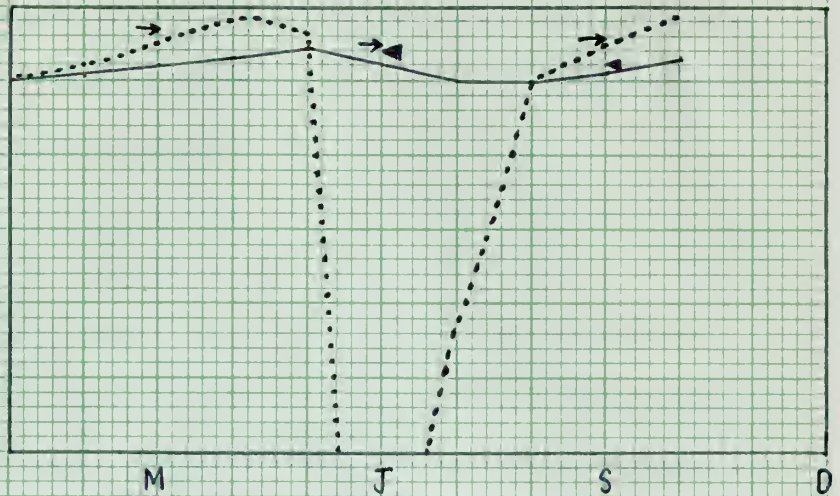
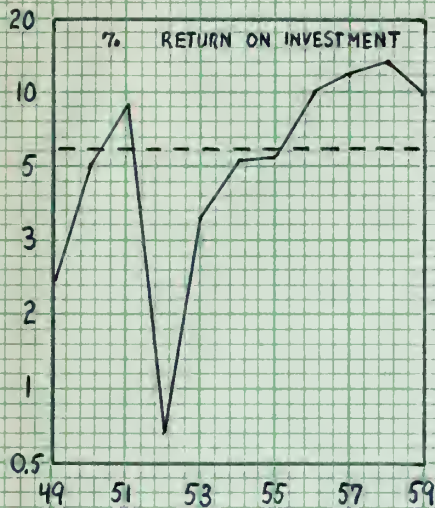
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X DEPARTMENT

RETURN ON INVESTMENT - TURNOVER - EARNINGS AS % OF SALES



— ACTUAL
 --- AVERAGE 10 YEARS

Fig. 5

ANNUAL BASIS
 — TO DATE
 ... MONTHLY
 ← CALENDAR YEAR
 ▲ QUARTERLY
 → FORECAST YEAR } FORECAST

annual basis by multiplying the quarterly forecast by four, and the expected position is indicated by placing an arrowhead at the March ordinate.

The No. 2 forecast comes out in April for the period, April through March of the following year. The calendar year forecast, which is now three month's actual operations plus nine months' forecast, is corrected, and a new position is indicated on the December ordinate by means of a No. 2 arrow. The second quarter, April, May, and June is put on an annual basis and applied to the first quarter to determine the expected position at the end of June. This is indicated by placing an arrowhead at the June ordinate. Since the forecast runs twelve months in the future, it is now possible to indicate the position expected at the end of March, 1960, by placing an arrow, pointing to the right on the March ordinate.

The same procedure is followed for the No. 3 and No. 4 forecasts with No. 3 for the calendar year consisting of six months actual and six months forecast, and No. 4 made up of nine months actual and three months forecast.

Tabulation of Figure Data

Since one of the main functions of the graphic presentation is to show the trend not only of one individual item, but also of that item with respect to others, it is necessary to have close at hand the figures to support the plot. In the case of Dupont this data as shown in Fig. 6 is shown simultaneously with, and to the left of the graphic presentation.

X DEPARTMENT

RETURN ON INVESTMENT--TURNOVER--EARNINGS AS PER CENT
OF SALES TO DATE--ANNUAL BASIS

Mos.	Return on Investment		Turnover		Earnings as % of Sales	
	1958	1959	1958	1959	1958	1959
Jan.	9.7	9.6	69.4	66.1	13.9	14.5
Feb.	9.8	10.3	70.8	61.7	13.9	16.7
Mar.	11.0	11.5	75.5	60.8	14.6	18.9
Apr.	12.1	13.1	84.5	61.9	14.4	21.1
May	12.3	13.8	88.8	62.6	13.8	22.0
Jun.	12.1	11.4	85.8	65.1	14.1	17.5
Jul.	12.1	10.0	84.2	66.9	14.4	14.9
Aug.	12.1	10.0	83.6	68.6	14.4	14.6
Sep.	12.3	10.5	85.6	71.4	14.3	14.7
Oct.	12.5	11.3	87.5	76.7	14.3	14.7
Nov.	12.5		86.0		14.5	
Dec.	12.8		83.9		15.2	

ANNUAL

Years	Return on Investment		Turnover		Earnings as % of Sales	
1949	2.3		46.5		5.0	
1950	5.3		58.0		9.1	
1951	8.3		65.0		12.7	
1952	.7		33.2		2.0	
1953	3.4		65.0		5.1	
1954	5.5		70.0		7.9	
1955	6.0		62.5		9.6	
1956	9.8		70.0		14.0	
1957	11.9		75.0		15.8	
1958	12.8		83.9		15.2	
Avg.	6.4		62.1		10.3	

(Fig. 6 will be continued on the following page)

(Fig. 6 Continued)

FORECASTS

	Return on Forecast Investment		Turnover		Earnings as % of Sales	
	Calendar Year	Forecast Year	Calendar Year	Forecast Year	Calendar Year	Forecast Year
#1	14.2	14.2	72.0	72.0	19.7	19.7
2	14.5	16.3	67.5	75.0	21.5	21.6
3	11.0	13.5	73.0	86.7	15.1	15.8
4	10.8	14.3	73.2	94.8	14.7	15.0

Fig. 6.--Chart Tabulation of Figure Data

The chart depicted in Fig. 7 Sales and Transfers, and Earnings in dollars. It supplies the basic data for the calculation of Earnings as a per cent of Sales as shown in Fig. 5. The same plotting procedures are utilized throughout the process.

Fig. 8 represents Cost of Sales: Mill Cost, Selling, Freight and Delivery, and Administrative Expenses, all shown as a per cent of sales. The trends developed in these charts are helpful in the analysis of variations in Earnings as a per cent of Sales, (Fig. 5). However, the over-all rate of production for the month is shown to afford a comparison between this and Mill Cost.

The Total Inventories, Accounts Receivable, and Cash are shown in Fig. 9. The Inventory investment is shown as compared with a standard expressed in terms of Month's Supply.

X DEPARTMENT SALES AND TRANSFERS-EARNINGS (IN MILLIONS OF DOLLARS)

SALES	130	150	143	152	133	147	155	181	175	149	143	144	148	151	155	159	162	168	179
TRANSFERS	12	19	19	13	12	13	21	24	28	22	24	27	31	33	27	24	24	25	26
EARNINGS	149	12	19	13	12	13	21	24	28	22	24	27	31	33	27	24	24	25	26

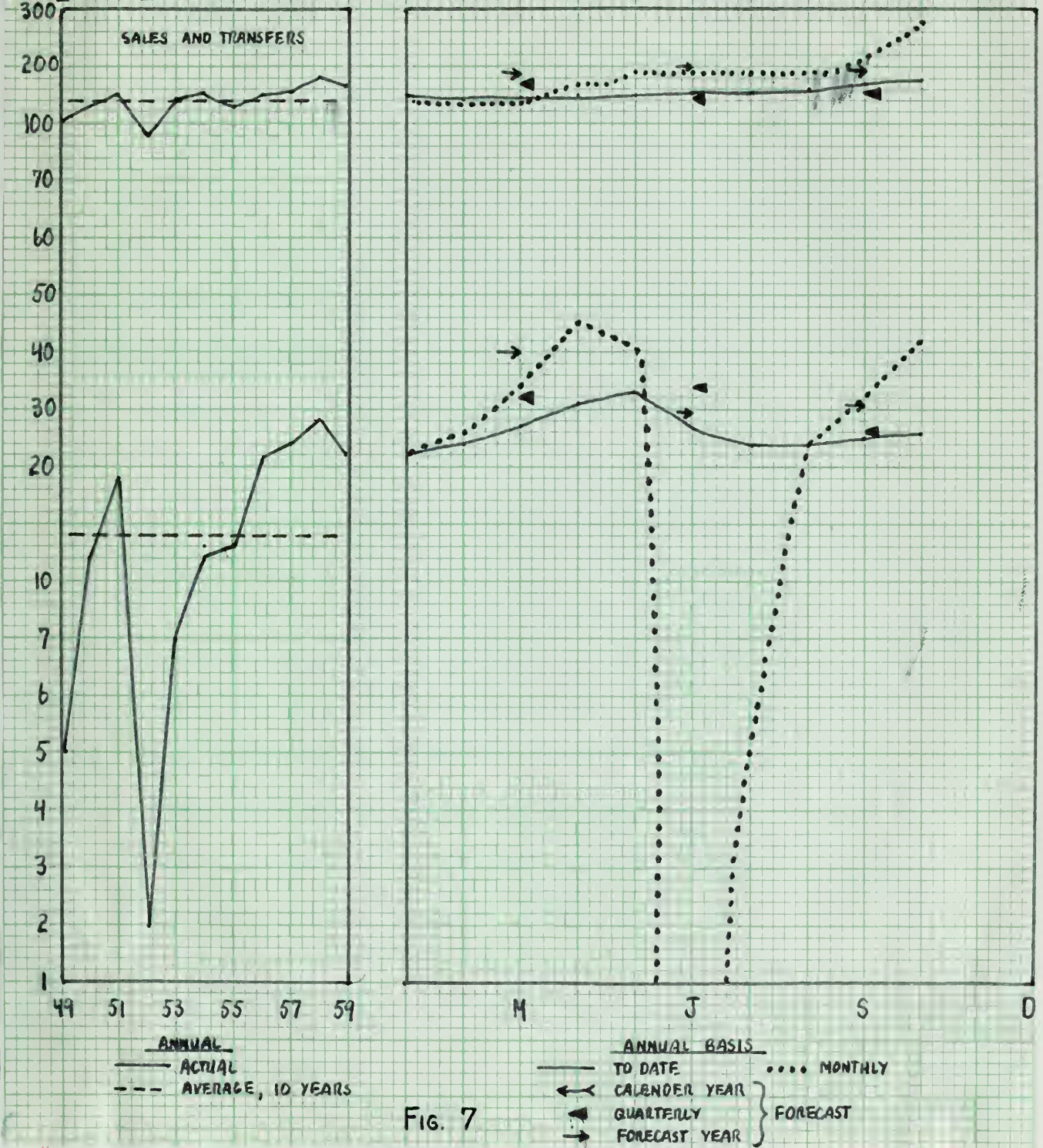
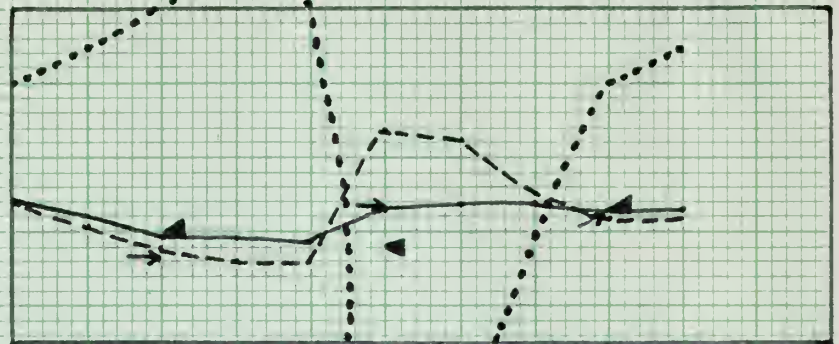
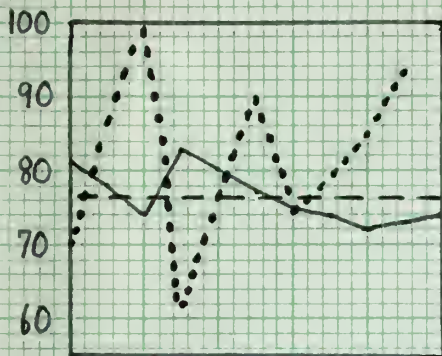


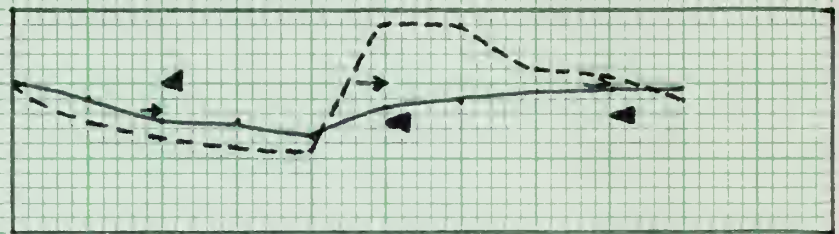
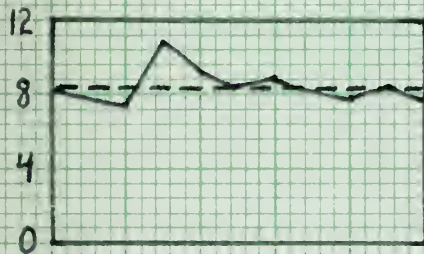
Fig. 7

X DEPARTMENT EXPENSES AS PER CENT OF SALES

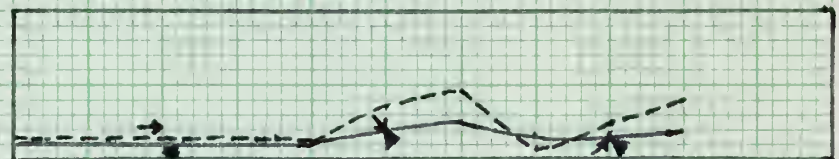
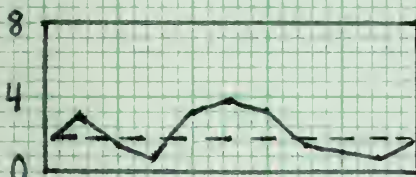
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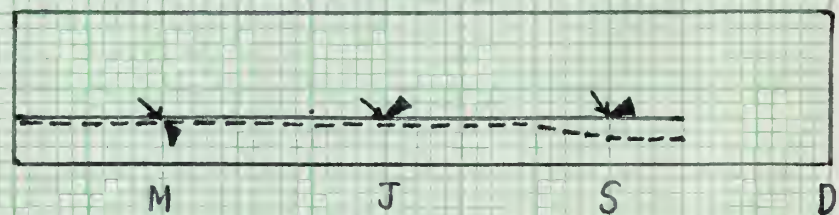
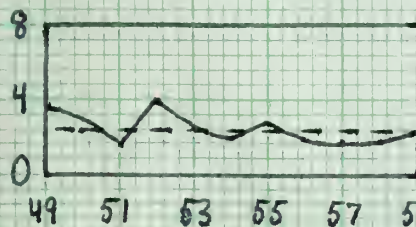
SELLING EXPENSE



FREIGHT AND DELIVERY



ADMINISTRATIVE



ANNUAL
 — ACTUAL
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 PRODUCTION AS % OF CAPACITY

ANNUAL BASIS
 — TO DATE
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FIG. 8

ACTUAL
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X DEPARTMENT INVENTORIES AND ACCOUNTS RECEIVABLE COMPARED WITH STANDARD-CASH

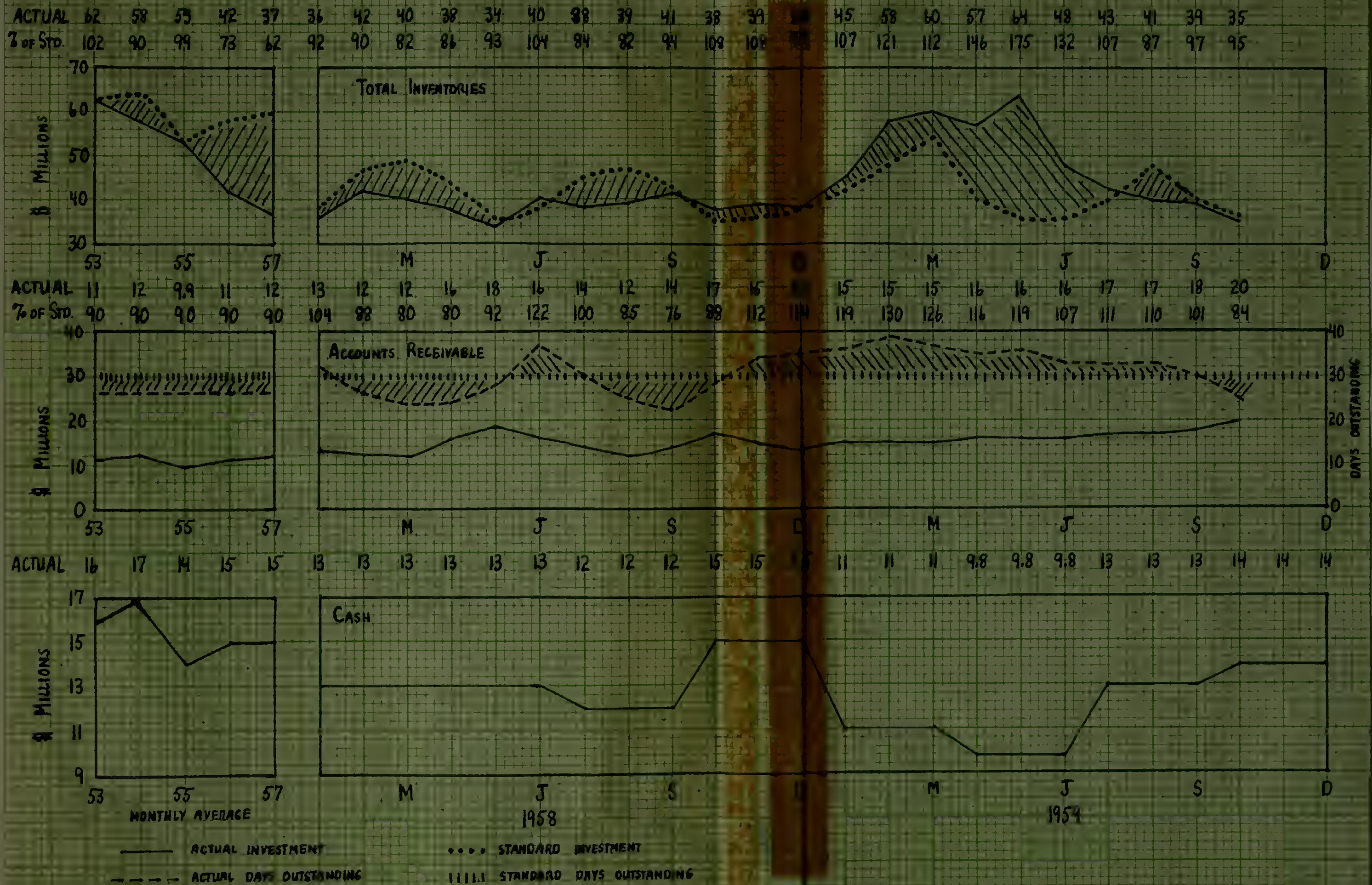


Fig. 9

The cross hatched areas above and below the solid line representing actual investment, show under and over investment in Inventory respectively.

The Accounts Receivable dollar balance at the end of the month is shown as a solid line, and Days Outstanding as a dashed line, (Fig. 9). Accounts Receivable Standard Days Outstanding are shown as a dotted line, and are expressed as a given number of days' sales outstanding at the end of any month. It reflects terms extended to the trade and past collection experience. In the case of the X Department Standard Days' Outstanding are thirty, and the cross hatched areas above and below Days Outstanding indicate better than expected or a lag in collections, respectively.

Total Investment is shown, (Fig. 10), segregated into Permanent Investment and Working Capital. When used with the chart showing Sales, (Fig. 7), this chart furnishes the principal factors affecting Turnover.

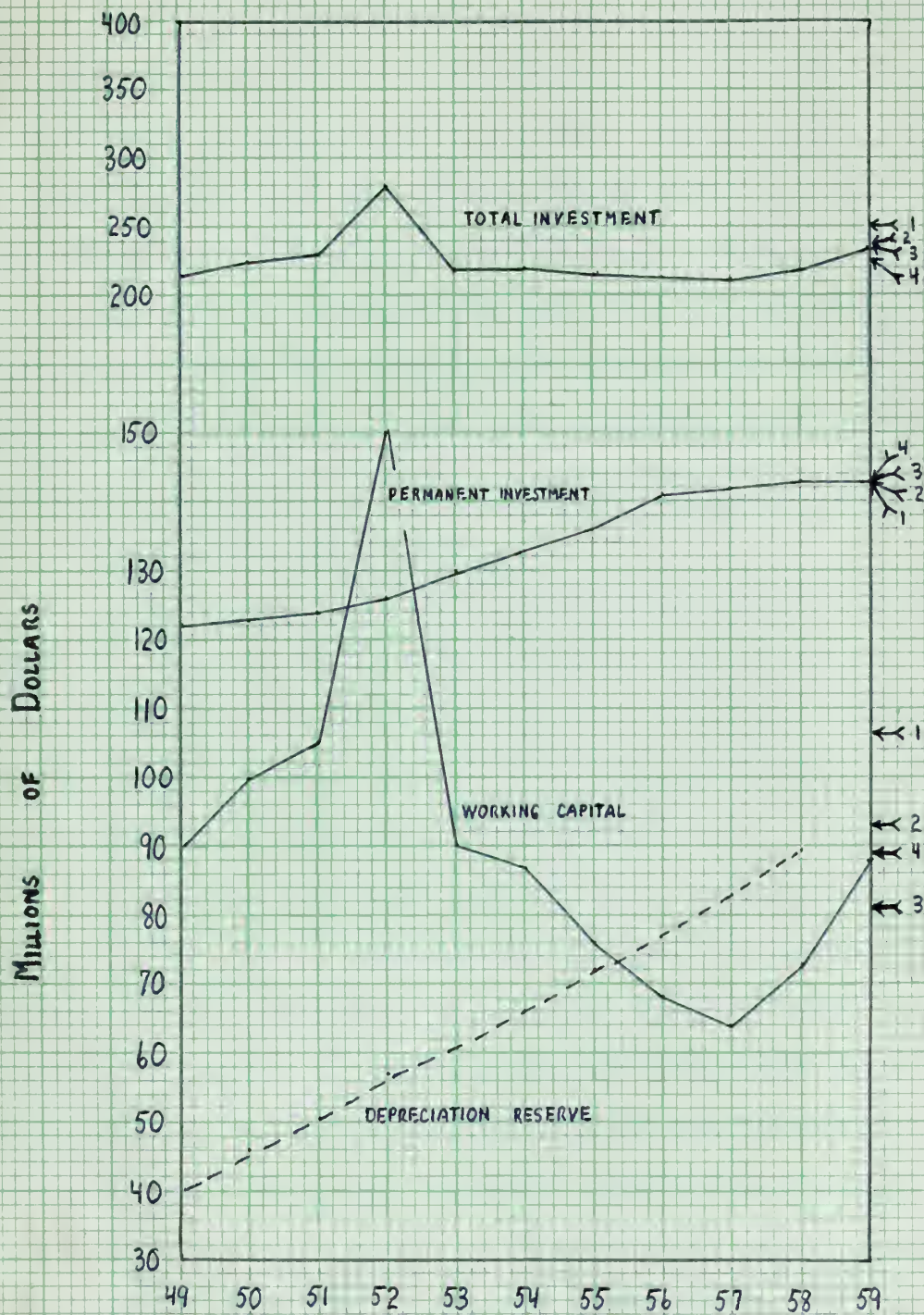
Hypothetical Analysis

The foregoing charts show the results of operating a mythical department under assumed conditions, and are intended to illustrate the manner in which the Dupont Company's charts are utilized in actual practice. As a further illustration the following analysis is submitted.

Since 1955, Return on Investment indicates a steady increase, (Fig. 5), and Turnover in the same period has also been climbing. Also on the incline were Earnings as per cent of

X DEPARTMENT

TOTAL INVESTMENT - WORKING CAPITAL - PERMANENT INVESTMENT



ANNUAL
 AVERAGE INVESTMENT
 — ACTUAL
 ← CALENDAR YEAR FORECAST

Fig. 10

Sales and Transfers. The reason for the improved Return on Investment can be directly attributed to the increased Turnover and Earnings as a per cent of Sales and Transfers.

A look at the current year to determine what has been happening to date shows that Return on Investment in January, on an annual basis, is slightly lower than in 1958. However, it started to climb, and by the end of April was at a higher point than at any other time shown on the chart. Per cent Turnover, after a considerable drop in January, continued downward, and by the end of April had leveled off considerably below 1958. Earnings as per cent of Sales and Transfers dropped slightly in January, climbed rapidly, and by the end of April were considerably above 1958.

The reason for the improved Return on Investment in the first four months of 1959 can be traced to increased Earnings as a per cent of Sales and Transfers, partially offset by a decrease in Turnover. If Turnover had not dropped, Return on Investment would have been even higher than it was in April.

Assuming that 1958 represents a normal operating year for X Department, it would be advisable to determine why the profit margin is considerably higher than in 1958, and why Turnover is lower. Sales and Transfers in 1958 were \$181,000,000, (Fig. 7). On an annual basis, January was considerably below that level and continued downward over the early months of 1959. By the end of April, Sales were about \$148,000,000--considerably below 1958. If Total Investment increased in the first four months of 1959, this factor combined with decreased sales would

account for the decreased Turnover. This based on the fact that Turnover equals Sales divided by Total Investment.

However, analysis of Total investment would show that the trend of Permanent Investment showed little fluctuation compared with the rising trend in working capital, (Fig. 10). It would appear that further analysis of Working Capital is in order, (Fig. 9). It can be seen that Total Inventory increased from \$38,000,000 at the beginning of the year to a peak in March, and then dropped off to \$57,000,000 in April, at which time it was 146 per cent of standard. Accounts Receivable increased from about \$13,000,000 to about 16,000,000 despite reduced Sales. Cash on the other hand declined about \$5,000,000 for the same period, January through April, but not enough to offset the increase in Accounts Receivable and Inventory. The foregoing leads to the conclusion that the decrease in Turnover could definitely be attributed to increased Working Capital and lower Sales.

It is now possible to determine why Earnings as a per cent of Sales increased. In 1958 Earnings were \$28,000,000, and in January, on an annual basis, they showed a decline. However, they recovered and steadily improved, and by April they were \$31,000,000, (Fig. 5). Therefore, Increased Earnings account for the increase in Earnings as a per cent of Sales.

Analysis of Cost of Sales should determine why Earnings improved despite a drop in sales volume. Mill Cost as per cent of Sales declined because of lower unit costs which in turn were

due to a high rate of production in the first four months, (Fig. 8). Production as per cent of capacity moved upward in this period. This high production in the face of declining sales was justified on the basis of the sales forecast. Decreasing Selling Expense was attributed to reduction of the sales force and curtailed advertising. Therefore the increased Earnings, (Fig. 5) can be attributed to lower Mill Costs and Selling Expenses.

CHAPTER V

THE JOHNSON & JOHNSON PROGRAM

Like Dupont, this company was selected for review on the basis of its financial reporting system. In effect, they report on the basis of the "management by exception" principle. The information was obtained from papers presented by Ernest A. Carlson, Controller of Johnson and Johnson, at the Financial Management Conference of the American Management Association in New York City, December, 1955.

Organization

Johnson and Johnson consists of ten companies in the United States and 21 companies in other parts of the world. Each of the companies is complete in its organization, each one with a board of directors composed of operating executives of the particular company. Each is autonomous in operation. Financial activities are separated so that earnings are determined for each corporate unit, whose effectiveness as a profit producer is thereby subject to measurement.

As this corporate pattern grew, it became necessary to set up a management organization, (Fig. 11), in the parent company that was capable of dealing with the problems presented by such a diverse group. Under this arrangement, active

operating executives of the parent company, (Johnson and Johnson), and the presidents of the major domestic affiliates make up the 24 member Board of Directors.

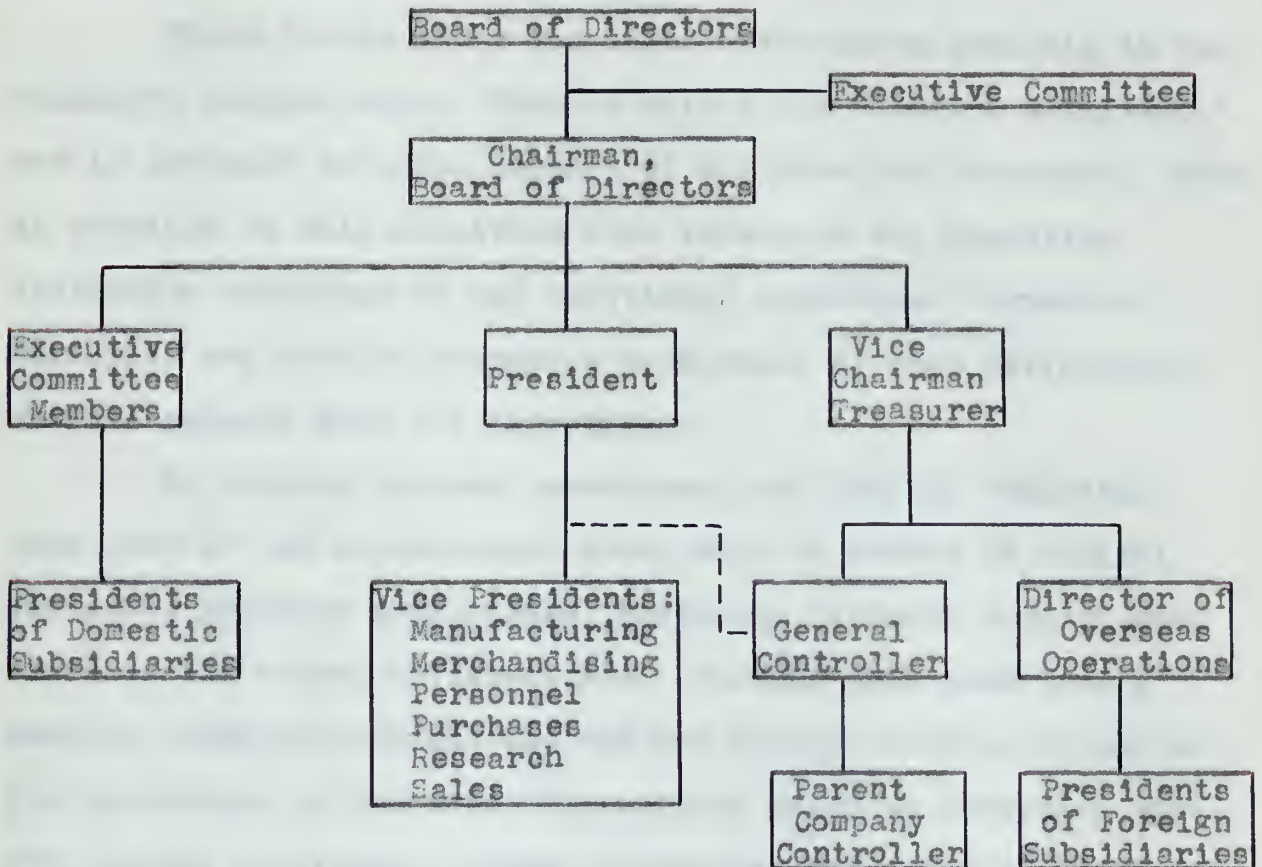
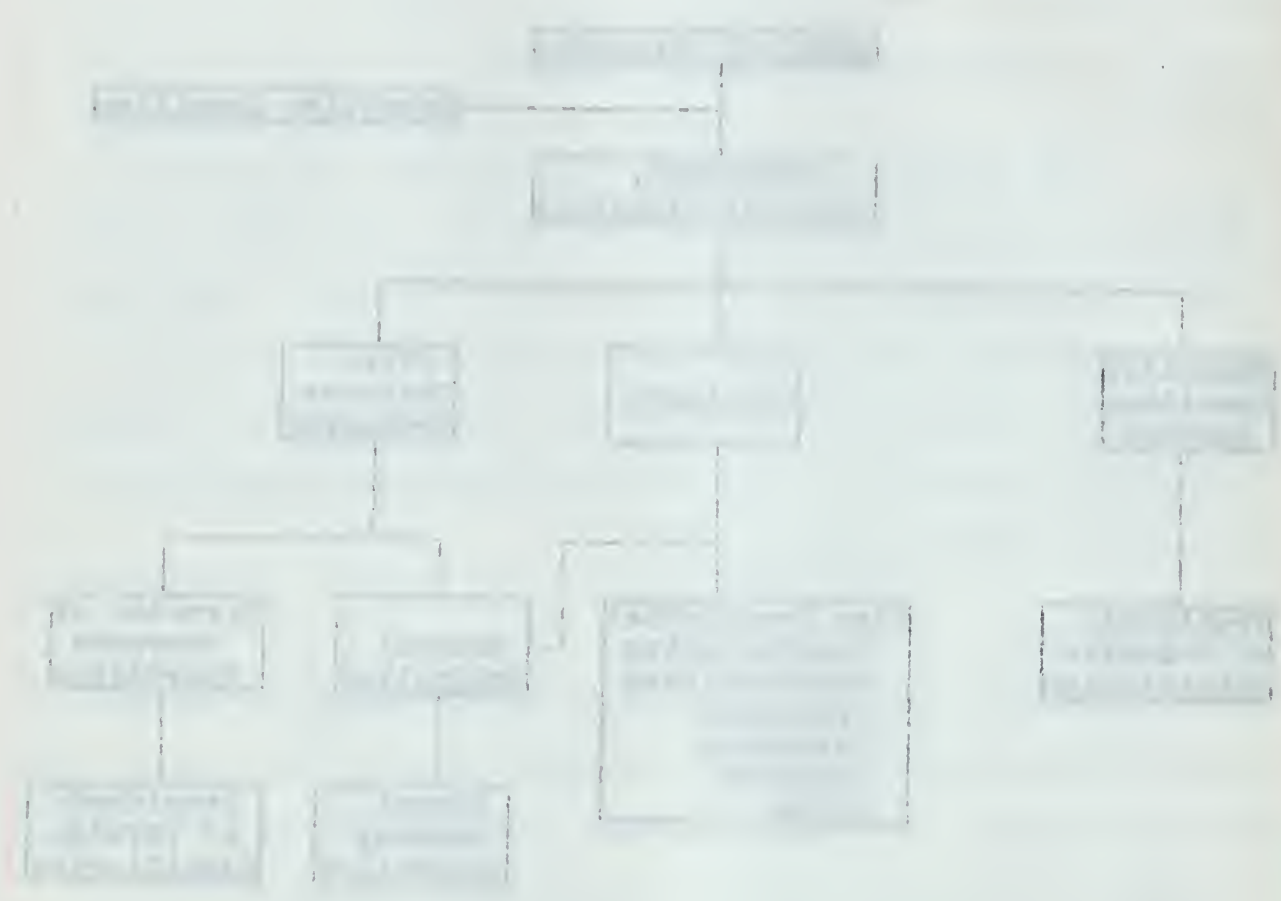


Fig. 11--Johnson & Johnson--Summary Organization Chart

The Board of Directors established an Executive Committee, consisting of seven of its members, to handle many of the day to day problems, and to make recommendations to the board on matters requiring its action. It is at this level that major financial policies are decided, including recommendations on substantial capital expenditures, dividend policies of

The present study was designed to investigate the effects of various factors on the growth and development of the human embryo. The study was conducted in a laboratory setting and involved the use of various techniques and equipment.



From the above diagram, it can be seen that the study is a comprehensive investigation of human embryo development, covering both growth and environmental factors.

The results of the study showed that the growth and development of the human embryo is a complex process involving many factors. The study found that the growth and development of the human embryo is significantly affected by various factors, including nutrition, stress, and cell division. The study also found that the growth and development of the human embryo is significantly affected by the environment, including maternal nutrition and stress. The study concluded that the growth and development of the human embryo is a complex process involving many factors, and further research is needed to better understand the mechanisms involved.

affiliated companies, and methods of financing capital expenditures and growth. An advisory liaison function is exercised through Executive Committee members with the presidents of operating companies in this country.

There is one other committee which works entirely in the financial control area. This is called the "Profits Committee," and is composed of seven members of the Board of Directors. Data is supplied to this committee from forecasts and operating statements presented by the individual companies. Expected forecasts are studied against a background of past performance and the general over all objectives.

In judging company operations, the Profits Committee uses much of the conventional data, such as return on capital employed, industry comparisons, inventory turnover comparisons, share of the market attained, etc. Through this committee's reviews, with individuals who are not wholly involved in day to day operations of the unit, the company gains an effective tool for judging individual company operations and pointing up areas for improvement.

The Controller's Department

The line organization reporting to the Parent Company Controller includes all the accounting and office service functions other than insurance, taxes, and internal auditing, which report directly to the general controller and assistant treasurer. In addition, two staff functions report directly to the controller: one pertains to electronic data processing;

the other to methods and procedures, (Fig. 12).

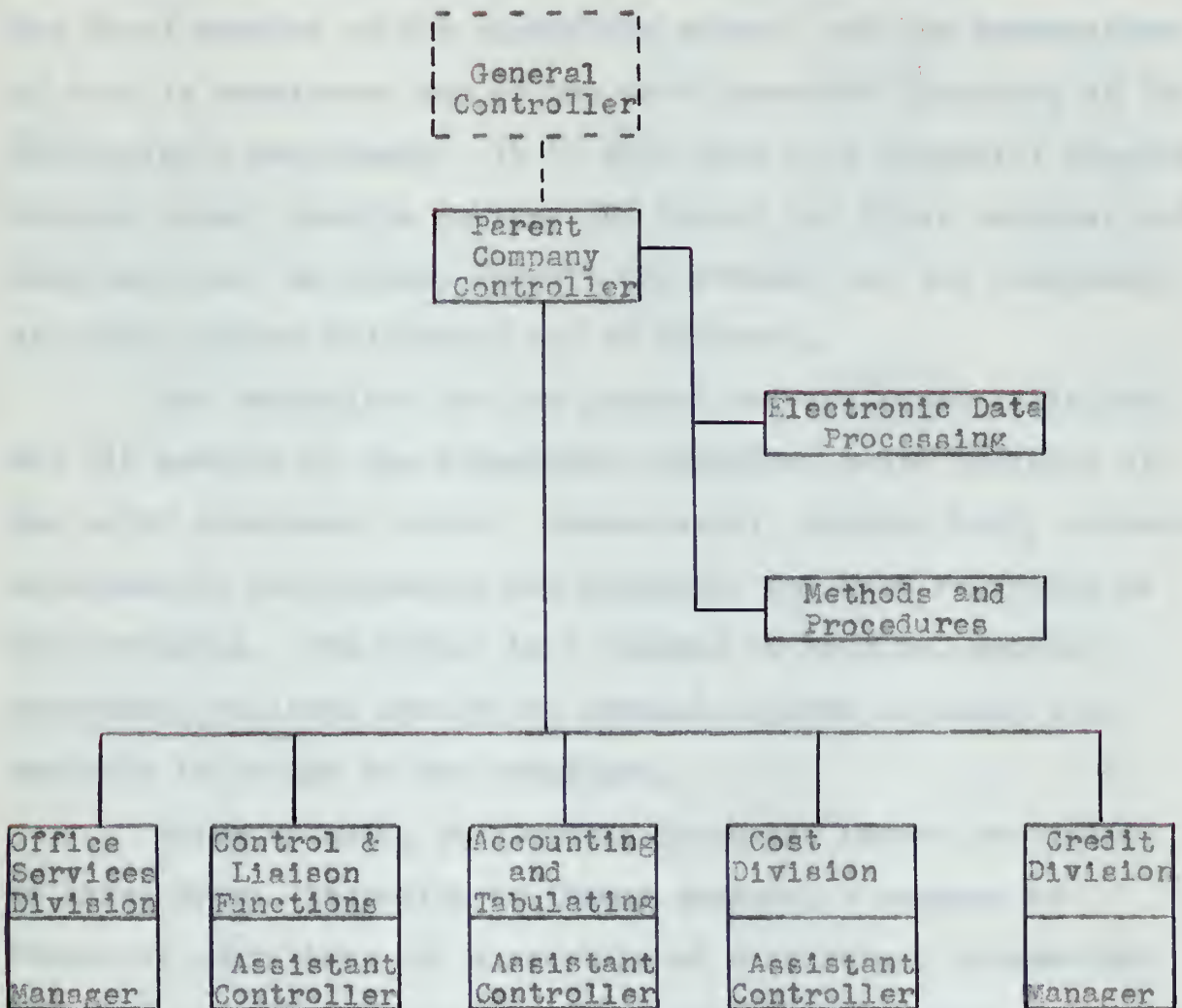


Fig. 12.--Controller's Department

In addition to his direct responsibilities, the parent company controller has functional responsibility for the work of the controllers located in the Chicago and Dallas plants. This functional control is accomplished through the issuance of standard procedures, reviews of reports, internal audits, and interplant liaison.

Management Reporting

At Johnson & Johnson the financial report is considered the final product of the accounting effort, and the preparation of same is considered one of the most important functions in the Controller's Department. It is felt that good financial reports measure actual results against the budget and other targets, and when they lead to action, profit improvement and the attainment of other company objectives can be achieved.

The controller and the general and assistant treasurer are all members of the Management Committee, which includes all the major department heads. Consequently, through daily contacts, departmental relationships are informal, and much reporting is done verbally. The result is a minimum of routine, regular reporting, replaced instead by special reports in which the emphasis is placed on the exception.

Prior to 1955, the monthly financial report consisted of three pages, including an income summary, a summary of financial condition, and a schedule of statistical information. In 1955, this was reduced to a one page monthly report of estimate of income, released on the fifth working day. The monthly estimate is supplemented with a more complete report at the end of each quarter.

The summary of financial condition, (Fig. 13), replaces the conventional balance sheet, and is designed to concentrate management's attention on the important items.

As at September 30, 1955			
	<u>This Month</u>	<u>Last Month</u>	<u>Dec. 31, 1954</u>
CASH	\$6,690	\$8,250	\$5,560
% of current liabilities	180%	162%	152%
DUE FROM CUSTOMERS	\$5,201	\$6,140	\$4,247
Number of days sales	32	29	34
INVENTORIES VALUED AT LIFO	\$7,491	\$7,206	\$8,029
Budgeted for turnover of six times	\$7,180		
TAX LIABILITIES NOT COVERED BY TAX NOTES	---	\$1,780	\$ 922

Fig. 13.--Summary of Financial Condition

The estimated income statement, (Fig. 14), reports actual sales and computed gross profit. The other calculations arriving at net income reflect the budgeted amounts adjusted for abnormalities recorded during the month. As stated previously, this monthly estimate is released on the fifth working day.

Figs. 13 and 14 (which appears on the following page) represent examples of the type of financial reporting practiced at Johnson & Johnson, and are fairly self explanatory in nature. The most important factors are those on which this reporting technique are based. In reporting financial condition and income, more emphasis is placed on budgets and forecasts than upon actual results. Therefore, because of the extensive coverage of budget information, the reporting of actual figures

Estimated Income Statement
(in thousands of dollars)

MONTH ENDED OCTOBER 31

	1955		1954
	Actual	Revised Budget	
NET TRADE SALES	\$4,261	\$3,990	\$3,741
STANDARD GROSS PROFIT . . .	1,704	1,580	1,403
NET INCOME FROM OPERATIONS.	213	191	172
Percentage of gross profit to sales.	40.0%	39.6%	37.5%
Percentage of net income to sales.	5.0%	4.8%	4.6%
YEAR TO DATE			
NET TRADE SALES	\$38,929	\$38,410	\$35,176
STANDARD GROSS PROFIT . . .	15,182	15,364	12,804
NET INCOME FROM OPERATIONS.	2,024	1,882	1,653
Percentage of gross profit to sales	39.0%	40.0%	36.4%
Percentage of net income to sales	5.2%	4.9%	4.7%
COMMENTS			

Fig. 14.--Estimated Income Statement

is after the fact, generally in confirmation of budget data. It can be logically concluded then, that only the exceptions require attention and explanations. However, for this type of reporting to be effective, it is essential that personal presentation and verbal interpretation accompany all important reports.

CHAPTER VI

KOPPERS COMPANY

In researching this paper, the Koppers Company was found to be one of the few companies which still issues a fully detailed financial report to top management. The material for this section was obtained from a paper entitled "Reporting in a Control Group Organization", and written by Thomas J. McGinnis, Manager, Control Section, Koppers Company. It was presented at a special methods review conference held by the American Management Association in New York City on May 4, 1953.

Organization

Koppers is a highly diversified company producing a wide variety of industrial goods. It has six operating divisions supported by the staff departments, each of which operates in a specific functional field, (Fig. 15). Reporting directly to the President, in addition to the Public Relations Department, is the Control Section. This section is a management control group, whose purpose is to establish and operate the broad management controls by which top management can direct its business. Although its duties extend into the fields of organizational planning, procedures, and methods, it is its work on reports that will be discussed in this chapter.

KOPPERS COMPANY, INC.

ORGANIZATION CHART

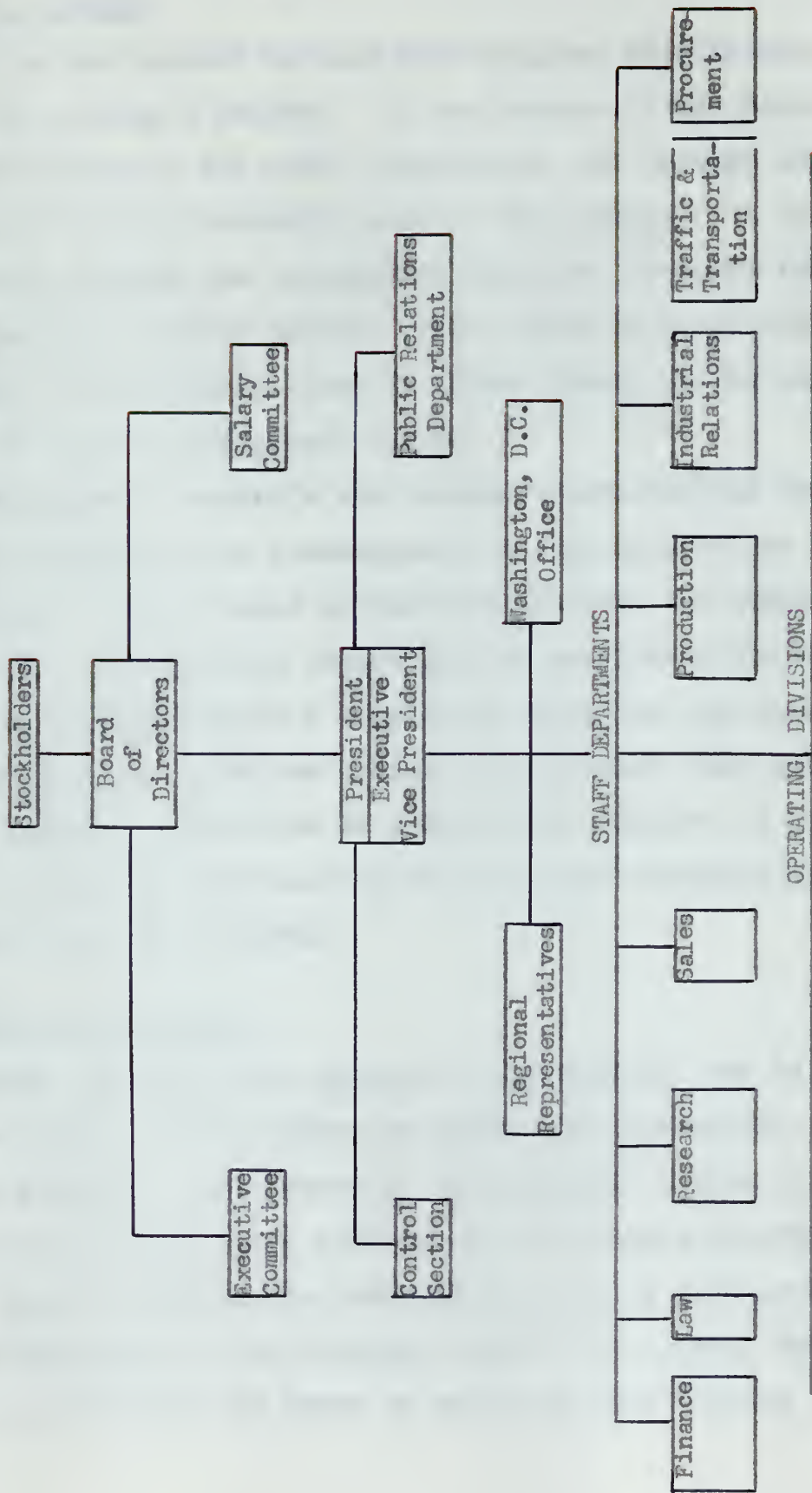


Fig. 15.--Koppers Organization Chart

The Control Section

It is the control section that designs, coordinates, and produces the company's program. In the process it may reach into each of the divisions and staff departments, and through them indirectly into every operating unit of the company. It is this section that, through the information received, produces the Koppers' Monthly Progress Report. This report is considered the report which top management uses to inform itself on the company's progress and to plan management action.

The Control Section's wide scope of interest and broad coverage of functions are advantageous in execution of the reporting activity. This is based on the premise that, for maximum effectiveness, the Progress report must be completely factual, must present information in a completely impartial and analytical manner, and must be objective always, and critical when necessary. Since the Control Section has no predominant interest in any one function or type of operation, it is in a very favorable position to possess these requirements.

Collecting the Statistics

There are two major sources of information, one to obtain statistical data, and the other to obtain the explanatory, narrative material. The source of the statistical data is largely the Treasury and Accounting sections of the Finance Department. In order that it receive the information which is most useful for the preparation of the finished report, the Control Section prepares, in advance, the forms on which the data will be

supplied. A set of these forms, including all the tabulations required to present the monthly results of a particular division, is furnished to the accounting group shortly in advance of the monthly closing. On these tabulations, the Control Section has entered the data representing the programmed performance for the month or year to date, as the case may be. In the accounting group, the corresponding actual figures are entered on these work sheets as the various accounts are closed. The percentage of the actual performance relative to the programmed is calculated and entered, and the completed forms returned to the Control Section.

The sources of the explanatory, narrative material are the operating divisions and the staff departments. Admittedly, this type of material does not lend itself to the use of prepared forms as well as the purely statistical data. However, through repetitive and constantly improved practice, a satisfactory system of communication has been achieved for covering all the pertinent phases of the month's operations.

The staff departments report their activities for the month, indicating the progress they have made on the particular projects in which they are engaged. Where possible, the narrative is supported by pertinent statistical information.

The six operating divisions each submit a narrative report commenting on the month's business. Then, since practically every phase of the division's operation has been programmed, appropriate explanations are expected and made wherever actual performance has varied significantly from the program. Comments

deal with sales, sales prices, market developments, production, production costs, and such other subjects as are applicable to the reporting division.

Analysis and Interpretation

The information received from the operating divisions and staff departments is thoroughly analyzed and related to the statistical data which it is supposed to explain, with the objective that the finished report will leave no room for an unanswered "why" in the minds of its readers. The analysis to which these reports is subjected is extremely thorough. Explanations of variations from programmed performance are in all cases tested against the statistical facts. In addition, the Control Section adds its own observations and comments to aid in the aforementioned objective, and every phase of the business receives comment in the final report.

It is felt that the thoroughness and care with which this report is prepared is justified, not only because it goes to top management, but because it is the only report that this level of management will receive. The report is aimed at providing full interpretation for management, thereby allowing its full attention to be directed toward the necessary remedial action. The complete checking and cross checking of data results in elimination of confusion caused by conflicting information on a particular subject, as may be the case where individual reports are received from various sources.

The Finished Report

The cover of the Koppers Monthly Progress Report carries the notation "Secret," and is intended for use only by authorized members of management. The distribution is carefully recorded by copy number, and the copies are recalled and destroyed when they have served their purpose.

The Monthly Progress Report is divided into four main sections. Section 1 covers "Koppers Company, Inc., and Subsidiaries," providing a consolidated picture of the over all company's progress and results. The Control Section prepares this part of the report by summarizing the most important factors which have a bearing on the success or failure in attaining the over all goals.

Section 2 contains six individual reports, one for each of the operating divisions. These are the end product of the statistical and narrative information as analyzed and interpreted by the Control Section. Section 3 contains the reports of the 11 staff departments, which are mainly narrative reports supported by charts and tables where applicable. Section 4 is a monthly economic review, prepared from information submitted by the Market Research and Economics Section of the Staff Sales Department.

Preparation of the Report

Working on the theory that different executives like different things, the report is designed to at least try to please everyone. The narrative is blended with the appropriate

charts and tables in order to present in one general area all the information on a particular subject. Actually the charts, graphs, tables, and narrative supplement one another with the text providing the analysis and conclusions that a chart or table, alone, cannot provide.

The typical table used provides a column for the program, one for the corresponding actual figures, and one for the percentage of the actual to the program. The chart shows both the monthly and the year to date program and actual data, and, as a slight concession to comparison with past history, the actual results of the preceding year.

CHAPTER VII

CONCLUSIONS

On the basis of the foregoing research it is submitted that there is neither an ultimate reporting system nor a perfect report. Rather, it is a proposition of comparing the system or report with certain empirical criteria as a basis for comparison.

The Reporting System

Consider the differences in the assignment of the reporting function within the three companies studied. In the Dupont Organization it lies with the Treasurer's Department. In Johnson and Johnson the Controller's Office houses this function, and Koppers assigns the responsibility to a separate Control Section. However, in all three cases each has direct access to the President, and the responsibility for the operation of the reporting system is delegated.

The company organizational structure is reflected in the reporting systems employed by the three corporations. The nine Industrial Departments each have at least one set of charts at Dupont, thereby acquiring accountability for performance. At Koppers, standard performance levels are maintained for all Operating and Staff Departments, with the result that deviations are accountable, and included in the Monthly Progress Report. The

organization at Johnson and Johnson, with its policy of decentralization, is a bit different. Due to the semi autonomous nature of the separate plants, the parent company compares their costs of operations with each other, and budgeted costs. In addition, the reporting system of the parent company includes the manufacturing departments for that plant.

An important requirement for any reporting system is that it cover all the important controllable elements of performance that affect the group's contribution to company-wide goals. This factor is very evident in the Dupont chart system where the elements are arranged in a mathematical sequence to produce, as an end result, Return on Investment. Each element is charted for performance evaluation. At Koppers, all statistics related to the determination of company performance are included in the Progress Report. The management by exception principle used at Johnson and Johnson shows those elements applicable to the item under analysis.

Although the three studies were specifically of different reporting techniques, it should be understood that all conformed to the principle represented by the "Information Pyramid." Traditionally detailed reports are prepared for the lower layers of management, and as in the case of Koppers, included a supplementary material in the Progress Report. However it is not axiomatic that top management get only a condensed report, for in a large sense, this depends on personal taste.

If the reporting system is to remain effective, it is

essential that it possess a degree of flexibility so that it can be reviewed and adjusted as necessary. The chart system at Dupont is fairly rigid, but is kept under review in the event that an improved procedure is discovered. The Control Section at Koppers is forced to keep its system current, in that theirs is the only report received by top management, and therefore, subject to thorough analysis. The special report emphasizing the exceptions is such that it controls itself. Established solely for special occasions, it is extremely flexible, and somewhat immune to obsolescence or report pile-up.

Conclusion

The three companies under consideration each employed a different reporting system and technique. However, they complied with the empirical data concluded from the preceding chapters, and repeated here.

- A. Definite assignment of reporting responsibility
- B. Conformance with organization structure for accountability
- C. Inclusion of controllable performance elements
- D. Conformance with Information Pyramid
- E. Under continuous review for possible adjustment

Therefore, except possibly in concept, the three systems are equally effective for the conditions as stated.

The Report

If the objective determination of what constitutes a good reporting system is difficult, the task of preparing a

universally accepted report is monumental. There are, of course, some characteristics that are common to an acceptable report. It should refer to an element of performance that has some significant bearing on the end result, and represent a dynamic analysis through comparisons. With respect to economy, it should be prepared at a cost that bears a reasonable relationship to the value it produces. Beyond this point the subject blends into the grayness of individual concept. That which represents essential facts for one management may not do the same for another. As a case in point, it hardly seems possible that the top management at Koppers would be satisfied with the special exception reporting practiced at Johnson and Johnson.

It was stated earlier that a personal presentation, complete with interpretation, was essential to the value of the report. Yet, two of the three companies studied, held widely divergent views.

At Dupont, a complete absence of narrative is indicated in the chart presentation. Assuming that the chart supervisor is standing by to answer questions, this system eliminates the chances of being bogged down by a particularly wordy narration.

Conversely, at Koppers, not only does the Control Section analyze and interpret the data received from the Operating and Staff Departments, but it puts it into narrative form for the Monthly Progress Report. Although this method appears to work satisfactorily, it is the opinion of the writer that misinterpretation could occur due to the fact that the Control Section might be unfamiliar with the staff and operating

functions.

What form should the report take--chart, exception, or full detailed? The attention of the entire group is held on one item at a time with a chart presentation at Dupont. With the entire report in front of him, a Koppers executive might find his interest wandering toward some item of particular importance to him. At Johnson and Johnson a special exception report might skip over some important aspect.

Conclusion

The three companies utilized different report forms, with success, resulting in the conclusion that there are several factors capable of measuring the worth of a financial report. Although they may differ in form, they seem to fulfill the below requirements, as far as the individual company is concerned.

- A. Cover an element of performance relevant to end results
- B. Present dynamic analysis
- C. Report only essential facts
- D. Focus attention on significant items
- E. Form should be easy to understand and use
- F. Use proper distribution
- G. Issue promptly.

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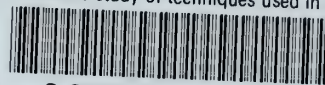
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